# VILLAGE OF BURR RIDGE PUBLIC WATER SUPPLY 2006 CONSUMER CONFIDENCE REPORT

The Village of Burr Ridge, in compliance with The Safe Drinking Water Act (SDWA), is issuing this year's Consumer Confidence Report (CCR) for the period of January 1 to December 31, 2005. This report is intended to provide you with important information about the quality and source of your drinking water. During 2005, the water provided by the Village met all USEPA and state drinking water quality standards and we are pleased to report that there were no violations during this period. The Village dilligently monitors the water distribution system taking a minimum of 10 samples for bacteriological testing each month. We are committed to providing you with the safest and most reliable water supply possible. If you have any questions about this report or concerns about your water system, please contact James Lukas, Water and Sewer Division of the Village of Burr Ridge Public Works Department at (630) 323-4733 ext. 454. This report is also available on the Village of Burr Ridge website <a href="http://www.burr-ridge.gov">http://www.burr-ridge.gov</a>.

#### SOURCE WATER

Burr Ridge uses water from Lake Michigan, treated by the City of Chicago, and purchased from the Village of Bedford Park. We also have three stand-by wells that <u>were not used</u> during 2005. These wells are tested and maintained in working order and are intended to be used <u>in case of emergency only</u>.

Lake Michigan is a surface water supply used to provide drinking water for Chicago and over 123 suburban communities. Lake Michigan serves as a source of drinking water, as a place for swimming and fishing, and is utilized for both recreational boating and commercial shipping. All 63 miles of shoreline within Illinois are considered to be in good condition by the EPA. Further information on our community water supply's source water assessment is available on the USGS web site at <a href="http://usgs.gov">http://usgs.gov</a>, the Illinois Environmental Protection Agency (IEPA) at <a href="http://www.epa.state.il.us/water/">http://www.epa.state.il.us/water/</a>, the City of Chicago Department of Water Management at <a href="http://www.cityofchicago.org/WaterManagement/">http://www.cityofchicago.org/WaterManagement/</a> or by calling the Groundwater Section of the Illinois EPA at 217-785-4787.

The sources of drinking water in Illinois (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it can dissolve naturally occurring minerals and radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Possible contaminants consist of:

- <u>Microbial contaminants</u>, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife;
- <u>Inorganic contaminants</u>, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining or farming;
- <u>Pesticides and herbicides</u>, which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses;
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products
  of industrial processes and petroleum production, and can also come from gas stations, urban stormwater
  runoff and septic systems;
- <u>Radioactive contaminants</u>, which may be naturally occurring or be the result of oil and gas production and mining activities.

The regulations in place restrict industrial and sewage treatment plant effluents from entering Lake Michigan, thereby reducing the risk of having these contaminants in the water.

In order to ensure that tap water is safe to drink, the USEPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. The FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants, can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

#### ABOUT THE DATA & DATA TABLE FOOTNOTES

**Turbidity** - Turbidity is a measure of the cloudiness of the water. Chicago monitors it because it is a good indicator of water quality and the effectiveness of their filtration system and disinfectants.

**Lead** - Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels in your home may be higher than in other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to flush your tap for 30 seconds to 2 minutes before using the water, or have your water tested by an independent laboratory. Testing for lead done by the Village of Burr Ridge shows results either not detectable or well below the Action Level. Additional general information is available from the USEPA Safe Drinking Water Hotline at 1-800-426-4791.

**Asbestos** - Chicago examines samples for asbestos fibers on a routine basis. The EPA has determined that asbestos fibers greater than 10 microns in length could potentially cause lung cancer. They do not find fibers that are in this size category.

**Haloacetic acids** - Additional disinfectant by-products are being monitored. Chicago began analyzing for these compounds in July, 1998. In December, 1998 the rule was finalized which set an MCL for HAAs at 60 ppb. Thus far, testing shows that Chicago is averaging 11.8 ppb, which is comfortably below the regulated level. The range of detections was 8.0 - 22.0 ppb. The Village of Burr Ridge also monitors for these by-products and our testing also shows results well below the regulated level.

**Cryptosporidium** - Analyses have been conducted monthly on the source water since April, 1993. Cryptosporidium has not been detected in these samples. Treatment processes have been optimized to ensure that if there are cryptosporidium cysts in the source water, they will be removed during the treatment process. By maintaining a low turbidity and thereby removing the particles from the water, the threat of cryptosporidium organisms getting into the drinking water system is greatly reduced.

**Fluoride** - Fluoride is added to the water supply to help promote strong teeth. The Illinois Department of Public Health recommends an optimal fluoride range of 0.9 mg/l to 1.2 mg/l.

**Sodium** - There currently is not a state or federal Maximum Contaminant Level for sodium. Monitoring is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult a physician about the level of sodium in the water.

**Voluntary testing** - The Chicago Water Department and the Village of Burr Ridge both monitor for contaminants, which are proposed to be regulated, or for which no standards currently exist but which could provide useful information in assessing the quality of the source water or the drinking water.

**Unregulated Contaminants** - A maximum contaminant level (MCL) for this contaminant has not been established by either state of federal regulations, nor has mandatory health effects language. The purpose for monitoring this contaminant is to assist USEPA in determining the occurrence of unregulated contaminants in drinking water, and whether future regulation is warranted.

#### **DEFINITION OF TERMS**

<u>Maximum Contaminant Level Goal (MCLG)</u>: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

<u>Maximum Contaminant Level (MCL)</u>: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

<u>Level Found</u>: This column represents an average of sample result data collected during the CCR calendar year. In some cases, it may represent a single sample if only one sample was collected.

<u>Range of Detections</u>: This column represents a range of individual sample results, from lowest to highest that were collected during the CCR calendar year.

<u>Date of Sample</u>: If a date appears in this column, the Illinois EPA requires monitoring for this contaminant less than once per year because the concentrations do not frequently change. If no date appears in the column, monitoring for this contaminant was conducted during the CCR calendar year.

<u>Action Level (AL)</u>: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

<u>Treatment Technique (TT)</u>: A required process intended to reduce the level of a contaminant in drinking water.

<u>Violation (V)</u>: If a violation had occurred an explanation of the violation and corrective measures taken would be explained in the informational section of this report

**nd:** Not detectable at testing limits.

**n/a:** Not applicable.

**Units of Measure:** ppb – parts per billion, or micrograms per liter; ppm – parts per million, or micrograms per liter; NTU – Nephelometric Turbidity Unit, used to measure cloudiness in drinking water; %<0.5 NTU – Percent samples less than 0.5 NTU; pCi/1 – Picocuries per liter, used to measure radioactivity.

# 2005 VIOLATION SUMMARY TABLE VILLAGE OF BURR RIDGE & CITY OF CHICAGO

#### **Violation Types:**

- MNR Monitoring Violation (failure to monitor)
- MCL Maximum Contaminant Level Violation (level found exceeded regulated standard)
- TTV Treatment Technique Violation (failure to meet water treatment process)
- RPV Reporting Violation (failure to submit results/required report by the deadline)
- \*\*\* State only violation (not a federal requirement)

### NO DRINKING WATER VIOLATIONS WERE RECORDED DURING 2005.

# CITY OF CHICAGO 2005 WATER QUALITY DATA DETECTED CONTAMINANTS

| Contaminant (unit of measurement) Typical Source of Contaminant  | MCLG | MCL        | Level found               | Range of detections | Violation | Date of sample |
|--|------|------------|---------------------------|---------------------|-----------|----------------|
| Microbial Contaminants   |      |            |                           |                     |           |                |
| TURBIDITY (%<0.3 NTU) Soil runoff. Lowest monthly percent meeting limit.   | n/a  | TT         | 100.000%                  | n/a                 |           | 2005           |
| TURBIDITY (NTU) Soil runoff. Highest single measurement.   | n/a  | TT=1NTUmax | .095                      | 0.08 – 0.12         |           |                |
| Inorganic Contaminants   |      |            |                           |                     |           |                |
| BARIUM (ppm) Discharge of drilling wastes, from metal refineries; erosion of natural deposits.   | 2    | 2          | 0.021                     | 0.020 -<br>0.022    |           |                |
| NITRATE (AS NITROGEN) (ppm) Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.   | 10   | 10         | 0.340                     | nd - 0.340          |           |                |
| CHROMIUM (ppm) Discharge from steel and pulp mills; erosion of natural desposits   | 10   | 10         | 5.6                       | nd – 5.6            |           |                |
| NITRATE & NITRITE (ppm) Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.   | 10   | 10         | 0.340                     | nd - 0.340          |           |                |
| Disinfectants/Disinfection By-Products   |      |            |                           |                     |           |                |
| TTHMs (TOTAL TRIHALOMETHANES) (ppb) By-product of drinking water disinfection.   | n/a  | 80         | 16.100                    | 10.000 –<br>22.500  |           |                |
| HAA5 (HALOACETIC ACIDS) (ppb)<br>By-product of drinking water disinfection.  | n/a  | 60         | 8.350                     | 5.500 –<br>10.700   |           |                |
| CHLORINE (as CI2) (ppm) Drinking water disinfectant.   | 4.0  | 4.0        | 0.6961 (Highest<br>Value) | 0.6468-<br>0.6961   |           |                |
| TOC [TOTAL ORGANIC CARBON] The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set by IEPA.                         |      |            |                           |                     |           |                |
| Unregulated Contaminants   |      |            |                           |                     |           |                |
| SULFATE (ppm) Erosion of naturally occurring deposits.   | n/a  | n/a        | 26.700                    | 25.800 -<br>27.600  |           |                |
| State Regulated Contaminants   |      |            |                           |                     |           |                |
| FLUORIDE (ppm) Water additive which promotes strong teeth.   | 4    | 4          | 0.959                     | 0.920 - 1.03        |           |                |
| SODIUM (ppm) Erosion of naturally occurring deposits; used as water softener.  | n/a  | n/a        | 7.500 (Highest Value)     | 7.300 –<br>7.500    |           |                |
| Radioactive Contaminants   |      |            |                           |                     |           |                |
| BETA/PHOTON EMITTERS (pCi/I) Decay of natural and man-made deposits.   | 0    | 50         | 2.00                      | nd - 2.000          |           | 11/5/01        |
| Non-regulated Contaminant Detections   |      |            |                           |                     |           |                |
| BORON (ppb) Erosion of naturally occurring deposits; used in detergents and as water softener; used in production of glass, cosmetics, pesticides, fire retardants, and for leather tanning. |      |            | 24.000                    | nd – 24.000         |           | 2005           |

### VILLAGE OF BURR RIDGE 2005 WATER QUALITY DATA DETECTED CONTAMINANTS

| Contaminant (unit of measurement) Typical Source of Contaminant                         | MCLG | MCL | Level<br>found | Range of detections | Violation | Date of sample |
|---|------|-----|----------------|---------------------|-----------|----------------|
| Microbial Contaminants  |      |     |                |                     |           |                |
| TOTAL COLIFORM BACTERIA (# positive samples/month) Naturally present in the environment | 0    | > 1 | nd             |                     | No        | monthly        |

## VILLAGE OF BURR RIDGE 2005 WATER QUALITY DATA DETECTED CONTAMINANTS

**Contaminant (unit of measurement)** 

TTHMs [TOTAL TRIHALOMETHANES] (ppb)

TOTAL HALOACETIC ACIDS (HAA5) (ppb)

By-product of drinking water chlorination.

**Action Level** 

90<sup>th</sup>

# of Sites

No

Date of

7/19/05

| Typical Source of Contaminant   | MCLG             | (AL)               | Percentile |     | Over (AL) | Sample             |
|---|------------------|--------------------|------------|-----|-----------|--------------------|
| Inorganic Contaminants  |                  |                    |            |     |           |                    |
| LEAD (ppb)  Corrosion of household plumbing systems, erosion of natural deposits.  Naturally present in the environment | 0                | 15                 | 6.         | 1   | 0         | 9/9/05             |
| COPPER (ppm) Corrosion of household plumbing systems; erosion of natural deposits.                                      | 1.3              | 1.3                | 0.0821     |     | 0         | 9/9/05             |
| Regulated Contaminant   | Highest<br>Level | Range of<br>Levels | MCLG       | MCL | Violation | Collection<br>Date |
| Disinfectants/Disinfection By-Products  |                  |                    |            |     |           |                    |

By-product of drinking water chlorination 17.6 9.2-17.6 n/a 60 No 5/17/05

Note: The state requires monitoring of certain contaminants less than once per year because the concentration of these contaminants do not change frequently. Therefore, some of this data may be more than one year old.

16-36

n/a

80

# CONSUMER EDUCATION: (COURTESY OF THE AMERICAN WATER WORKS ASSOCIATION)

- If all the water in the Great Lakes was spread evenly across the continental U.S., the ground would be covered with almost 10 feet of water.
- 47 percent of the US population uses surface water; 53 percent of the US population uses groundwater. (USEPA)
- ♦ Typically, households consume approximately 30% of their water for outdoor use, such as watering the lawn. Inside, toilets use the most water, with an average of 27 gallons per person per day.
- ♦ Homes with in-ground sprinkler systems use 35% more water outdoors than those who do not have an inground system. One reason may be that system controllers are not adjusted according to seasonal irrigation needs.
- As much as 30% of water can be lost to evaporation by watering the lawn during midday.
- Clothes washers can use as much as 30-35 gallons (114-133 liters) of water per cycle and dishwashers as much as 25 gallons (95 liters) per cycle.
- A full dishwasher is more water efficient than washing the same load by hand.
- If every household in America had a faucet that dripped once each second, 928 million gallons of water a day would leak away.

VILLAGE OF BURR RIDGE 7660 S. COUNTY LINE ROAD BURR RIDGE, IL 60527

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2006 Consumer Confidence Report

Important Information
Regarding the
Village of Burr Ridge
Drinking Water Supply